Basic Elements of Phase I and II Environmental Site Assessments

There are numerous risks involved with starting your own business. One that can be costly is dealing with hazardous waste contamination discovered on property you have recently acquired. Performing an environmental site assessment prior to acquiring a property can minimize that risk.

Be an Informed Consumer
Some people take a used car to a mechanic before they buy. Most people hire a building inspector to check out a house they wish to purchase. You should do the same when considering a commercial or industrial property purchase. Phase I and Phase II Environmental Site Assessments (ESAs) have been developed to evaluate environmental issues at any site previously used for commercial purposes.

Standards for the Phase I and Phase II ESAs have been established by the American Society for Testing and Materials (ASTM) to address the “All-Appropriate-Inquiry” (AAI) aspect to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLA contains national policy and procedures for containing or removing hazardous substances that have been released, and also provides funding and guidance for cleaning up some abandoned and contaminated hazardous waste sites. Be aware of state, local, or federal regulations outside of CERCLA that have other site assessment requirements and liability protections.

What is a Phase I ESA?
The Phase I ESA involves a review of records, a site inspection, and interviews with owners, occupants, neighbors and local government officials. While sampling and laboratory analysis are not always included in this phase, they should still be conducted by an environmental professional trained in the appropriate standards. The review of government records and interviews may take a lot of time. To ensure a quality assessment, allow sufficient time for the process.

Contamination can result from activities that took place on the site. Contamination could also come from activities at a nearby property. The records and interviews will be the best sources to provide this information. Public records are available regarding the locations of properties that have been classified as contaminated by federal or state regulations. Depending on their proximity to your site, contamination could have made its way to your site.

What is a Phase II ESA?
If a Phase I ESA identifies potential contamination of the site by hazardous materials, a Phase II ESA may be conducted. The Phase II ESA includes sampling and laboratory analysis to confirm the presence of hazardous materials. Some of the tests that may be performed include:

- surficial soil and water samples
- subsurface soil borings
- groundwater monitoring well installation, sampling, and analysis (may be appropriate on neighboring properties as well to determine the presence of contamination)
- drum sampling (if any were left on the property)
- sampling of dry wells, floor drains and catch basins
- transformer/capacitor sampling for Polychlorinated Biphenyls (PCBs)
- geophysical testing for buried tanks and drums
- testing of underground storage tanks

Depending on the results of the samples, the Phase II ESA should outline additional site investigation needs, and potential remedial actions that may be required to clean up the property.
How are ESAs Performed?
Each Phase I or II ESA should be performed by a trained and experienced environmental professional. The environmental professional should follow the ASTM and AAI Standards shown in the adjacent table. This professional may be aware of other state, local or federal regulations, beyond CERCLA, that have other site assessment requirements. An example of this can be found in s. 292.21, Wis. Stats, which outlines separate requirements for lenders conducting ESAs on foreclosed, contaminated properties. These requirements are different than ASTM and AAI Standards.

You can find environmental professionals listed in your Yellow Pages under Engineers—with possible subheadings of Consulting, Environmental, Geotechnical, or others—that may advertise that they can perform ESAs. Be sure to ask for and check references for any firm you consider hiring. The DNR’s Remediation and Redevelopment Website also provides valuable information on selecting an environmental consultant at https://dnr.wi.gov/topic/Brownfields/Select.html.

Hiring a firm with insufficient experience or training can only compound your risk if it fails to provide you with accurate data. The Small Business Environmental Assistance Program (SBEAP) has fact sheets available to help you, including a checklist of questions to ask any firm you consider hiring and a list of environmental consultants in Wisconsin:
- Clean Air Consultants in Wisconsin, https://dnr.wi.gov/files/pdf/pubs/sb/sb004.pdf. Contact SBEAP if you have questions about hiring a consultant or need more information.

How to Use the ESA Results
You know if your site is contaminated. What should be done to clean it up? Use the information resulting from your Phase I and II ESAs in your purchase agreement. Possible options might be:

⇒ Require that the current landowner clean up the property prior to the sale.
⇒ Reduce the cost of the property commensurate with the cost of remediation required.
⇒ Pursue acquisition and clean up alternatives that help control your environmental liability for the property.

Keep in mind the question “How clean is clean?” when working out the details. You, working with the DNR, not the seller, should establish the cleanup standards based on the NR 700 regulations and your needs. An experienced environmental professional performing the ESAs can help you by proposing the most up-to-date remedial methods and providing reasonable cost estimates. All details about who pays for cleanup costs and criteria for “how clean is clean” should be included in your final contract with the seller.

Clean Up Costs
Grant funds for assessing and cleaning up contamination may be available through a state or federal Brownfield grants program. For information about numerous, available sources of financial assistance from multiple agencies, check out the DNR’s Financial Resources Guide at https://dnr.wi.gov/topic/Brownfields/Financial.html.

More Information
For more information and staff contacts, see DNR’s Environmental Cleanup & Brownfields Redevelopment webpage at https://dnr.wi.gov/topic/Brownfields/.

### ASTM Standards for Conducting Environmental Site Assessments

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